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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/740,846	12/21/2000	Ji Woong Kim	K-244	6517

34610 7590 07/14/2004

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EXAMINER

PHILLIPS, HASSAN A

ART UNIT	PAPER NUMBER
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2151

DATE MAILED: 07/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/740,846

Applicant(s)

KIM, JI WOONG

Examiner

Hassan Phillips

Art Unit

2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-32 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 28 May 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This action is in response to amendments received April 23, 2004.

Response to Arguments

1. Applicant's arguments, see page 9, paragraph 4, and page 10, paragraph 2, filed April 23, 2004, with respect to the rejection(s) of claim(s) 1 under 35 USC § 102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Fowler et al. (hereinafter Fowler), U.S. patent 5,653,906.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 22, 24-27, are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Fowler.

3. In considering claim 22, Fowler discloses a method for operating a microwave oven comprising:

- a) Converting cooking information obtained from the Internet into a signal recognizable by a microcomputer, and cooking food in the oven based on the converted information in the response to a user signal, (col. 10, lines 62-67, col. 11, lines 1-47).

4. In considering claim 24, Fowler teaches the user signal generated when a cook start button is pressed by the user. See col. 25, lines 32-51.

5. In considering claim 25, Fowler teaches a microcomputer controlling the oven to cook food based on a set of control signals. See col. 25, lines 45-51.

6. In considering claim 26, Fowler teaches a first control signal allowing the microcomputer to sense an operational state of a signal converting unit. See col. 25, lines 45-51.

7. In considering claim 27, Fowler further teaches the microcomputer recognizing a data transmission zone of the signal converting unit when the first control signal assumes a first level, and recognizes a data transmission zone of the microcomputer when the first control signal assumes a second level. See col. 18, lines 65-67, col. 19, lines 1-12.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 7, are rejected under 35 U.S.C. 103(a) as being unpatentable over Emmott et al. (hereinafter Emmott), EP Patent 0 965 795 in view of Fowler.

3. In considering claim 1, Emmott discloses an Internet microwave oven comprising:

- a) An access unit connected to a communication line, for accessing the Internet, (col. 4, lines 9-12);
- b) A search engine for searching cooking information and other various information when the Internet is accessed through the access unit, (col. 3, lines 17-27);
- c) A microcomputer for downloading cooking information and other various information searched by the search engine at a user's request, (col. 5, lines 23-39);

- d) A display unit for displaying the cooking information and other various information converted by a signal converting unit in accordance with a control signal of the microcomputer, (col. 3, lines 42-48).

Although the disclosed apparatus of Emmott, shows substantial features of the claimed invention, it fails to explicitly disclose:

- a) The microcomputer automatically outputting a control signal to cook food depending on information selected by the user.

Nevertheless, in a similar field of endeavor, Fowler teaches a control system for a microwave oven comprising:

- a) Automatically performing a cooking operation from downloaded information selected by a user, (col. 11, lines 26-47);
- b) Converting cooking information selected by a user into a signal recognizable by a microcomputer, (col. 26, lines 53-61).

Thus, given the teachings of Fowler, it would have been obvious to a person of ordinary skill in the art, at the time of the present invention, to modify the teachings of Emmott in order to provide a user the ability to select downloaded cooking information, whereby the signal converting unit would then convert the downloaded cooking information selected by the user to a signal recognizable by the microcomputer in order to automatically perform a cooking operation. This would have provided a simple, efficient, user-friendly means for performing cooking operations by downloading cooking information and using the downloaded information to cook particular items, Fowler, col. 11, lines 3-25.

4. In considering claim 2, the apparatus disclosed by Emmott comprises a modem for an access unit. See col. 4, lines 9-12.

5. In considering claim 3, it is inherent in the apparatus disclosed by Emmott that the search engine is an Internet browser. See Emmott, col. 5, lines 23-39.

6. In considering claim 4, the apparatus disclosed by Emmott comprises a liquid crystal display (LCD) for a display unit. See col. 4, lines 51-57.

7. In considering claim 5, Fowler further teaches a microcomputer recognizing a data transmission zone of the signal converting unit if a high signal generated by the signal converting unit is applied to the microcomputer, while the microcomputer recognizes a data transmission zone of the microcomputer if a low signal is applied to the microcomputer. See col. 18, lines 65-67, col. 19, lines 1-12. One of ordinary skill in the art would combine the teachings of Emmott with Fowler for the reasons indicated in consideration of claim 1.

8. In considering claim 7, Fowler teaches the converted cooking information selected by the user controlling the microcomputer to cook food. See col. 26, lines 53-67, col. 27, lines 1-9. One of ordinary skill in the art would combine the teachings of Emmott with Fowler for the reasons indicated in consideration of claim 1.

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Emmott.

10. In considering claim 6, although the disclosed method of Emmott et al. shows substantial features of the claimed invention, it fails to explicitly disclose:

- a) Communication between a search engine and a signal converter in accordance with RS-232C standards.

It would have been apparent to one of ordinary skill in the art to use an RS-232C interface because it is a standard used for communication between computers, terminals, and modems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of the present invention, to modify the teachings of Emmott et al., in order to communicate between the search engine and a signal converter by means of RS-232C standards. This would have provided a well known method of communication for internet browsing, when using the internet microwave oven disclosed by Emmott et al., col. 5, lines 23-39. Therefore, the claimed invention (claim 6) would have been an obvious modification of the methods disclosed by Emmott et al.

11. Claims 8-16, 23, are rejected under 35 U.S.C. 103(a) as being unpatentable over Fowler in view of Emmott.

12. In considering claim 8, Fowler discloses a microwave oven comprising:

- a) A microcomputer, (col. 7, lines 63-65);
- b) Obtaining cooking information over a network, (col. 10, lines 62-67, col. 11, lines 1-25);
- c) A converter which converts the cooking information into a form recognizable by the microcomputer, the microcomputer generating a control signal to cook food based on the converted cooking information in response to a user signal, (col. 27, lines 10-17);

Although the disclosed apparatus of Fowler, shows substantial features of the claimed invention, it fails to expressly disclose:

- a) Downloading the cooking information in response to a first user signal.

Nevertheless, Emmott teaches:

- a) Downloading cooking information from the Internet in response to a first user signal, (col. 5, lines 10-14).

Thus, given the teachings of Emmott, it would have been obvious to a person of ordinary skill in the art, at the time of the present invention, to modify the teachings of Fowler in order to download cooking information from the Internet in response to a first user signal. This would have provided a simple, efficient, user-friendly means for accessing appropriate cooking information over the Internet by the touch of a button, Emmott, col. 5, lines 14-22.

13. In considering claim 9, Fowler teaches the converted cooking information configuring at least one cooking parameter of the oven, and wherein the food is cooked

in accordance with the at least one parameter in response to the user signal. See col. 27, lines 10-17.

14. In considering claim 10, Fowler further teaches a display for displaying the cooking information. See col. 6, lines 47-67, col. 7, lines 1-5.

15. In considering claim 11, Fowler teaches a user signal selecting the cooking information on the display. See col. 26, lines 53-61.

16. In considering claim 12, Fowler teaches a user signal generated from activation of a cooking start button. See col. 25, lines 32-51.

17. In considering claim 13, Emmott teaches a search engine for obtaining the cooking information from an Internet site. See col. 5, lines 10-23. One of ordinary skill in the art would combine the teachings of Fowler with Emmott for the reasons indicated in consideration of claim 8.

18. In considering claim 14, it is implicit in the teachings of Fowler that the microcomputer receives the converted cooking information from the converter based on a data transmission available signal. See col. 7, lines 65-67, col. 8, lines 1-6.

19. In considering claim 15, it is implicit in the teachings of Fowler that the data transmission available signal indicates that the converter is in a state for sending data to the microcomputer. See col. 8, lines 24-28.

20. In considering claim 16, it is implicit in the teachings of Fowler that the data transmission available signal assumes a first level when the converter is in a state for sending data to the microcomputer and assumes a second level when the microcomputer is in a state for receiving data from the converter. See col. 27, lines 25-43.

21. In considering claim 23, Fowler further discloses:

- a) Displaying the cooking information, (col. 7, lines 3-5);

Although the disclosed apparatus of Fowler, shows substantial features of the claimed invention, it fails to expressly disclose:

- a) Downloading the cooking information when selected by the user.

Nevertheless, Emmott teaches:

- a) Downloading cooking information from the Internet in response to a user signal, (col. 5, lines 10-14).

Thus, given the teachings of Emmott, it would have been obvious to a person of ordinary skill in the art, at the time of the present invention, to modify the teachings of Fowler in order to download cooking information from the Internet when selected by the user. This would have provided a simple, efficient, user-friendly means for accessing

appropriate cooking information over the Internet by the touch of a button, Emmott, col. 5, lines 14-22.

22. Claims 17-21, 28, are rejected under 35 U.S.C. 103(a) as being unpatentable over Fowler in view of Perholtz et al. (hereinafter Perholtz), U.S. patent 5,732,212.

23. In considering claim 17, although the disclosed apparatus of Fowler, shows substantial features of the claimed invention, it fails to expressly disclose:

- a) A global interrupt signal.

Nevertheless, global interrupt signals were well known in the art at the time of the present invention. This is shown in a similar field of endeavor where Perholtz teaches a system and method for remotely controlling a data processing device comprising:

- a) Inputting an interrupt signal into a microcomputer when scan codes become available for translation, (col. 38, lines 66-67, col. 39, lines 1-5).

Thus, given the teachings of Perholtz, it would have been obvious to a person of ordinary skill in the art, at the time of the present invention, to modify the teachings of Fowler in order to show a global interrupt signal being input into the microcomputer when a data transmission available signal assumes a first level. This would have invoked a routine to cook food in the microwave oven after the cooking information obtained from the Internet site was converted into form recognizable by the microcomputer and ready to be transmitted to the microcomputer, Perholtz, col. 39, lines 5-8.

24. In considering claim 18, it is implicit in the teachings of Fowler that a data read control signal is input into the microcomputer when the data transmission available signal assumes a first level. See col. 27, lines 25-43.

25. In considering claim 19, the teachings of Fowler provide a means for the data read control signal to be a 1-byte interrupt signal. See col. 27, lines 38-43.

26. In considering claim 20, Fowler teaches the microcomputer receiving the converted cooking information in synchronism with a data receive property signal, and the microcomputer recognizing that it is in a ready state to receive data when the data receive property signal assumes a first value and recognizes that it is in a state where data reading has been completed with the data receive property signal assuming a second value. See col. 27, lines 25-43.

27. In considering claim 21, the teachings of Fowler provide a means for the data transmission available signal, the global interrupt signal, the data read control signal, and the data receive property signal to be received through different ports of the microcomputer. See col. 27, lines 25-43.

28. In considering claim 28, although the disclosed apparatus of Fowler, shows substantial features of the claimed invention, it fails to expressly disclose:

a) A global interrupt signal.

Nevertheless, global interrupt signals were well known in the art at the time of the present invention. This is shown in a similar field of endeavor where Perholtz teaches a system and method for remotely controlling a data processing device comprising:

a) Inputting an interrupt signal into a microcomputer when scan codes

become available for translation, (col. 38, lines 66-67, col. 39, lines 1-5).

Thus, given the teachings of Perholtz, it would have been obvious to a person of ordinary skill in the art, at the time of the present invention, to modify the teachings of Fowler in order to show a second control signal being a global interrupt signal which is input into the microcomputer when the first control signal assumes the first level. This would have invoked a routine to cook food in the microwave oven after the cooking information obtained from the Internet site was converted into form recognizable by the microcomputer and the first control signal assumed its first level, Perholtz, col. 39, lines 5-8.

29. Claims 29-32, are rejected under 35 U.S.C. 103(a) as being unpatentable over Fowler.

30. In considering claim 29, although it is not expressly stated, it is implicit in the teachings of Fowler that a third control signal is a data read control signal which is input into the microcomputer when the first control signal assumes the first level. See col. 27, lines 25-43.

31. In considering claim 30, the teachings of Fowler provide a means for the data read control signal to be a 1-byte interrupt signal. See col. 27, lines 38-43.

32. In considering claim 31, Fowler teaches the microcomputer recognizing that it is in a ready state to receive data when a fourth control signal assumes a first value and recognizes that it is in a state where data reading has been completed when the fourth control signal assumes a second value. See col. 27, lines 25-43.

33. In considering claim 32, the teachings of Fowler provide a means for the first, second, third, and fourth control signals to be received through different ports of the microcomputer. See col. 27, lines 25-43.

Conclusion

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Emmott et al., EP Patent 0 965 795, discloses an Internet microwave oven.

Fowler et al., U.S. Patent 5,653,906, discloses a microwave oven that automatically performs a cooking function depending on cooking information selected by a user.

Perholtz et al., U.S. Patent 5,732,212, discloses inputting an interrupt signal into a microcomputer when scan codes become available for translation.


3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hassan Phillips whose telephone number is (703) 305-8760. The examiner can normally be reached on M-F 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (703) 305-4792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2151

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HP/
6/28/04



FRANTZ B. JEAN
PRIMARY EXAMINER